

REMARKS

Reconsideration is requested.

The claims have been amended, without prejudice, to advance prosecution by placing the claims in condition for allowance.

The Examiner's teleconference with the undersigned on November 24, 2010 is acknowledged, with appreciation. The claims are amended above in a manner believed to have been indicated by the Examiner to place the claims in condition for allowance. The Examiner is requested however to contact the undersigned, preferably by telephone, in the event anything further is required.

Claim 83 has been revised, without prejudice, to further define X_1 and G_1 , in view of the Examiner's indication that the substituents of the unamended claim do not find basis in the claim from it depends.

Claim 84 has been cancelled, without prejudice, in view of the Examiner's indication that the claimed substituents do not find basis in the claim from it depends.

Claim 88 has been amended to define further aspects of the disclosed and claimed compounds. Unamended claim 88 is understood to have been objected to by the Examiner as defining subject matter not found in the claim from which it depended. While claim 5 of granted U.S. Patent No. 7,632,870, defines substituents G_4 , X_3 and X_5 in a manner similar to claim 88, the Examiner will appreciate that the Examiner defined compounds of the originally-filed claims wherein in the structure of formula (I) when, among other things, X_6 is oxygen and X_2 is not bound to carbon 3 of the propene chain the claims were allegedly separately patentable from compounds wherein X_6 is oxygen

NAJIB et al
Appl. No. 10/520,079
Attny. Ref.: 3665-129
Supplemental Amendment
November 29, 2010

and X_2 is bound to carbon 3 of the propene chain. See the Examiner's Groups III and I of the Office Action dated February 28, 2007. The present application and the application which issued as U.S. Patent No. 7,632,870 do not share a common 35 USC § 120 priority claim.

The Examiner has previously confirmed consideration of an Office Action dated February 26, 2009 issued in Application No. 10/520,078, which issued as U.S. Patent No. 7,632,870, on June 3, 2009. U.S. Patent No. 7,632,870 issued December 15, 2009. Terminal Disclaimers were filed in Application No. 10/520,078 over the present application and U.S. Patent No. 7,385,082. The Examiner has indicated previous consideration of U.S. Patent No. 7,385,082 in the Information Disclosure Citation Form initialed June 3, 2009.

The issued claims of U.S. Patent No. 7,632,870 are reproduced below:

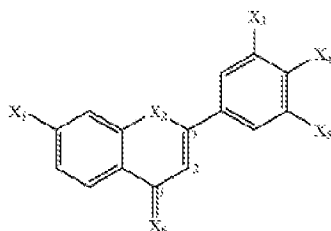
US 7,632,870 B2

63

- Komuves, L. G., K. Hanley, et al. (2000). "Stimulation of PPAR α promotes epidermal keratinocyte differentiation in vivo." *J Invest Dermatol* 115(3): 353-60.
- Lebeau, J., C. Furman, et al. (2000). "Antioxidant properties of di-tert-butylhydroxylated flavonoids." *Free Radic Biol Med* 29(9): 900-12.
- Mates, J. M., C. Perez-Gomez, et al. (1999). "Antioxidant enzymes and human diseases." *Clin Biochem* 32(8): 595-603.
- Morriere, P., A. Moysan, et al. (1991). "UVA-induced lipid peroxidation in cultured human fibroblasts." *Biochim Biophys Acta* 1084(3): 261-8.
- Neve, B. P., J. C. Fruchart, et al. (2000). "Role of the peroxisome proliferator-activated receptors (PPAR) in atherosclerosis." *Biochem Pharmacol* 60(8): 1245-50.
- Ram V J (2003). "Therapeutic role of peroxisome proliferator-activated receptors in obesity, diabetes and inflammation." *Prog Drug Res* 60: 93-132. Review
- Raspe, E., L. Madsen, et al. (1999). "Modulation of rat liver apolipoprotein gene expression and serum lipid levels by tetradecylthioacetic acid (TTA) via PPAR α activation." *J Lipid Res* 40(11): 2099-110.
- Staeis, B. and J. Auwerx (1998). "Regulation of apo A-I gene expression by fibrates." *Atherosclerosis* 137 Suppl: S19-23.

The invention claimed is:

1. A pharmaceutical composition, comprising one or more pharmaceutically acceptable excipients or vehicles and at least one substituted 1,3-diphenylprop-2-en-1-one derivative represented by formula (I) below:



wherein

- X1 represents a halogen or a ---R1 group or a group corresponding to the following formula: ---G1-R1 ,
- X2 represents a hydrogen atom,
- X3 represents a ---R3 group,
- X4 represents a group corresponding to the following formula: ---G4-R4 ,
- X5 represents a ---R5 group,
- X6 is an oxygen atom,
- R1, R3, R5, which are the same or different, represent an unsubstituted alkyl group having from one to seven carbon atoms.
- G1, G4, which are the same or different, represent an oxygen or sulfur atom.
- R4 represents an alkyl group having from one to seven carbon atoms containing one substituent, having the formula: ---COOR_6 ,

64

with R_6 representing a hydrogen atom or an alkyl group having from one to seven carbon atoms, and the optical and geometrical isomers, racemates, tautomers, salts and mixtures thereof.

2. The composition according to claim 1, wherein both G1 and G4 represent an oxygen atom.

3. The composition according to claim 1, wherein X1 is a ---G1-R1 group in which G1 is an oxygen atom and R1 is an unsubstituted alkyl group containing from two to seven carbon atoms.

4. The composition according to claim 1, wherein X1 represents a group corresponding to the formula ---G1-R1 , where G1 represents a sulphur atom and R1 is an unsubstituted alkyl group containing one or two carbon atoms.

5. The composition according to claim 1, wherein G4 is an oxygen atom, and X3 and X5 respectively represent R3 and R5, with R3 and R5 being alkyl groups having one or two carbon atoms.

6. The composition according to claim 1, wherein X1 represents a halogen.

7. The composition according to claim 1, wherein X4 represents $\text{---OC(CH}_3)_2\text{COOR}_6$.

8. The composition according to claim 1, wherein X4 represents $\text{---OC(CH}_3)_2\text{COOH}$.

9. The composition according to claim 1, wherein the derivative is selected in the group consisting of:

- 1-[4-chlorophenyl]-3-[3,5-dimethyl-4-tertbutyloxycarbonyldimethylmethoxyphenyl]prop-2-en-1-one,
- 1-[4-chlorophenyl]-3-[3,5-dimethyl-4-isopropoxy-carbonyldimethylmethoxyphenyl]prop-2-en-1-one,
- 1-[4-chlorophenyl]-3-[3,5-dimethyl-4-carboxydimethylmethoxyphenyl]prop-2-en-1-one,
- 1-[4-methylthiophenyl]-3-[3,5-dimethyl-4-tertbutyloxycarbonyldimethylmethoxyphenyl]prop-2-en-1-one,
- 1-[4-methylthiophenyl]-3-[3,5-dimethyl-4-isopropoxy-carbonyldimethylmethoxyphenyl]prop-2-en-1-one,
- 1-[4-methylthiophenyl]-3-[3,5-dimethyl-4-carboxydimethylmethoxyphenyl]prop-2-en-1-one,
- 1-[4-hexyloxyphenyl]-3-[3,5-dimethyl-4-tertbutyloxycarbonyldimethylmethoxyphenyl]prop-2-en-1-one,
- 1-[4-hexyloxyphenyl]-3-[3,5-dimethyl-4-carboxydimethylmethoxyphenyl]prop-2-en-1-one,
- 1-[4-bromophenyl]-3-[3,5-dimethyl-4-tertbutyloxycarbonyldimethylmethoxyphenyl]prop-2-en-1-one, and
- 1-[4-bromophenyl]-3-[3,5-dimethyl-4-carboxydimethylmethoxyphenyl]prop-2-en-1-one.

10. The composition according to claim 1, wherein the derivative is selected in the group consisting of:

- 1-[4-chlorophenyl]-3-[3,5-dimethyl-4-carboxydimethylmethoxyphenyl]prop-2-en-1-one,
- 1-[4-methylthiophenyl]-3-[3,5-dimethyl-4-carboxydimethylmethoxyphenyl]prop-2-en-1-one,
- 1-[4-hexyloxyphenyl]-3-[3,5-dimethyl-4-carboxydimethylmethoxyphenyl]prop-2-en-1-one, and
- 1-[4-bromophenyl]-3-[3,5-dimethyl-4-carboxydimethylmethoxyphenyl]prop-2-en-1-one.

11. A method for the treatment of diabetes, atherosclerosis or obesity comprising administering to a subject in need thereof, an effective amount of a composition according to claim 1.

* * * * *

While nothing further is believed to be required with regard to U.S. Patent No. 7,632,870, a Terminal Disclaimer over the patent is filed herewith. The Examiner is requested to contact the undersigned in the event anything further is required in this regard.

Claim 89 has been canceled, without prejudice, in view of the Examiner's indication that the claimed substituents do not find basis in the claim from which it depends.

Claim 94 has been amended, without prejudice, in view of the Examiner's indication that certain of the claimed substituents do not find basis in the claim from which it depends.

Claim 102 has been canceled, without prejudice.

Return of an initialed copy of the Information Disclosure Citation Forms, pursuant to MPEP § 609, filed September 8, 2010 and herewith is requested.

The claims are submitted to be in condition for allowance and a Notice to that effect is requested. The Examiner is requested to contact the undersigned, preferably by telephone, in the event anything further is required.

NAJIB et al
Appl. No. 10/520,079
Attny. Ref.: 3665-129
Supplemental Amendment
November 29, 2010

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /B. J. Sadoff/
 B. J. Sadoff
 Reg. No. 36,663

BJS:
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100